

Timo Bremer

Theoretical Concepts and Fieldwork Reality – A
Large-Scale Landscape-archaeological Project in
the Rhenish Lignite Opencast Mining Region and
Its Methodological Programme

in Wiebke Bebermeier – Robert Hebenstreit – Elke Kaiser – Jan Krause (eds.), Landscape
Archaeology. Proceedings of the International Conference Held in Berlin, 6th – 8th June 2012

Edited by Gerd Graßhoff and Michael Meyer,
Excellence Cluster Topoi, Berlin

eTopoi ISSN 2192-2608

<http://journal.topoi.org>



Except where otherwise noted,
content is licensed under a Creative Commons
Attribution 3.0 License:

<http://creativecommons.org/licenses/by/3.0>

Timo Bremer

Theoretical Concepts and Fieldwork Reality – A Large-Scale Landscape-archaeological Project in the Rhenish Lignite Opencast Mining Region and Its Methodological Programme

Late Antiquity; Middle Ages; field archaeology; theoretical objective of landscape archaeology; methodological concepts; scientific models; social structures.

Introduction

Knowledge about the early middle ages in the Lower Rhine area is mainly based on graveyards.¹ Settlements that have been excavated using modern methods are exceptions to this.² As a result, little is known about landscape-dynamics in this region from Late Antiquity to the Middle Ages.

The University of Bonn, the “LVR-Landesmuseum” and the “LVR-Amt für Bodendenkmalpflege” have therefore initiated a project funded by the “Stiftung zur Förderung der Archäologie im Rheinischen Braunkohlenrevier” named “Von der Spätantike zum hohen Mittelalter—Landschaftsarchäologische Untersuchungen im Raum Inden-Pier.” The aim of this project is to conduct an intensive landscape-archaeological exploration of the area around the village of Pier near the lignite opencast pit of Inden, 40km to the west of Cologne (Fig. 1).

The ongoing debate in all cultural sciences about the term “landscape” began with the “spatial turn.” Despite many differences in the details, a consensus has been reached that landscape is not only the physical background of culture but must also be seen as a complex arrangement with social, symbolic and mental dimensions.³ Programmatic concepts dealing with landscape archaeology are no exception.⁴

Apart from the theoretical objective, landscape archaeology is understood to be a field method focussing on the physical environment.⁵ The field method does not automatically lead to a better understanding of landscape in the contemporary sense.

Due to the given briefness, this article focuses on ‘explanatory’ approaches, which allows an initial approximation to the topic. Only when hermeneutics are also considered can a synthesis of the complex concept of “landscape” succeed in the author’s opinion.⁶ Regarding the non-physical dimensions, possible avenues leading from field archaeology to a synthesis of landscape are discussed below.

1 Nieveler 2006 enclosed map.

2 Weiler-Rahnfeld 2009.

3 e.g., Döring and Thielmann 2008, 7–45; Jäger 1994, 3; Werlen 2000 265–355.

4 e.g., Gramsch 2003; Meier 2009; Meyer and Hansen 2011.

5 Saile 1997; Schade 2000.

6 Cf. Lorenz 1997, 89–321.

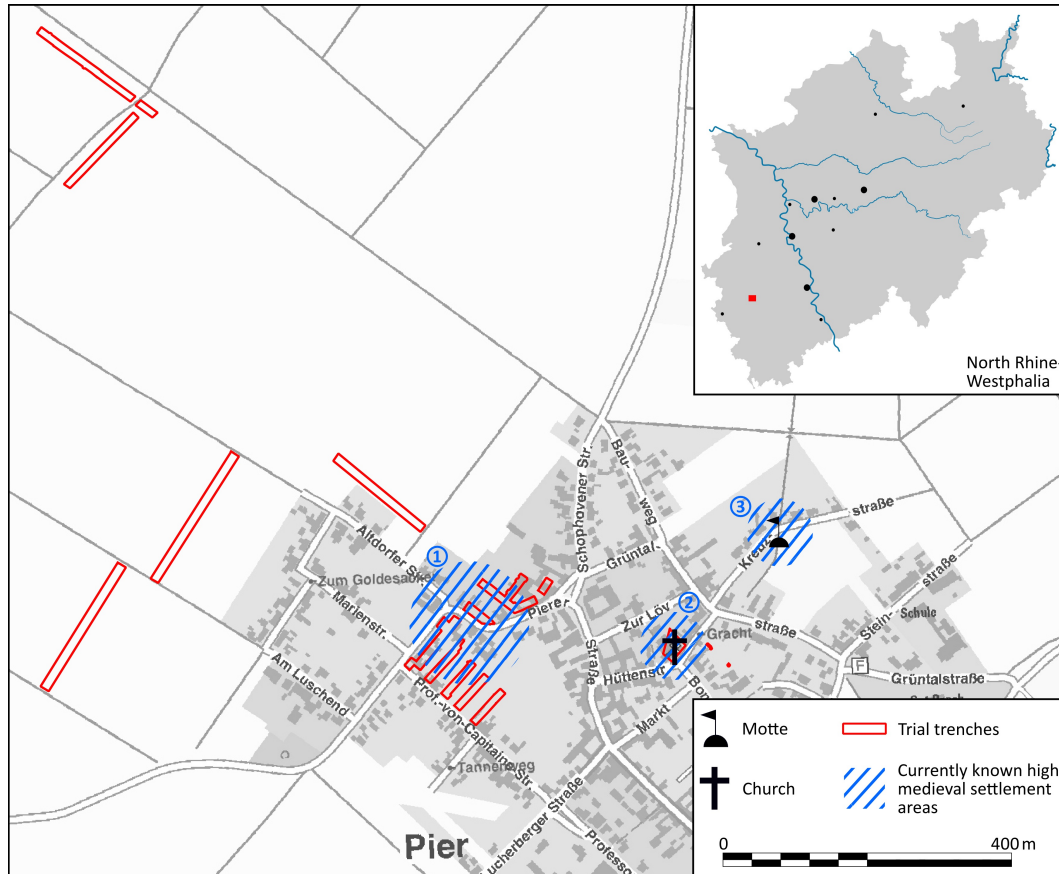


Fig. 1 | The research area around the village of Pier and the known High Medieval settlements. 1. Site identified by trial trenches. 2. Assumed settlement concentration around the church whose previous buildings date back to the early middle ages. 3. Conceivable site around a motte, known through surveys.

The “Pier-Project” in the Rhenish Lignite Opencast Mining Region

Fieldwork for the “Pier-Project” began with the preparation of trial trenches around and in the village in July 2011. During these preparations, the exact dimensions of two Roman “*villae rusticae*” and two known Merovingian graveyards were documented.⁷ Furthermore, an as yet unknown High Medieval site to the north west of the contemporary village was discovered.

Magnetometer and metal detector surveys were undertaken before and simultaneously to the first fieldwork campaign. In addition to this, the soils were mapped based on a tightly meshed grid of drillings; the excavations will be accompanied by several natural science analyses.

About one-fifth of the area around Pier and the village itself will be excavated up until 2016. The project therefore offers a great opportunity of acquiring a better understanding of the landscape-dynamics from Late Antiquity to Medieval times. But it is necessary to succeed in gathering from the physical world of excavation to a landscape-archaeological synthesis, including structural and mental aspects.

7 Reichert (in press).

A Classification Scheme of Theoretical Perspectives

Field archaeology and the landscape-archaeological concept will be classified in a three-dimensional diagram showing their different positions from the viewpoint of scientific theory (Fig. 2a). The axes of the diagram display the level of time, the geographic scale and the range of theories.

The scale for the level of time is F. Braudel's⁸ scheme of the *longue durée*, which goes from events (*l'histoire événementielle*) to long time spans with almost imperceptible changes (*l'histoire presque immobile*). The geographic axis is subdivided into micro-, meso- and macroscales. The range of theories are scaled into "working hypotheses," "middle-range theories" and "unified/generalised theories" according to R. K. Merton.⁹

Many characteristics connected with the levels of time by Braudel have equivalents on the axes of theory and geographic scale: in each case, the smallest entities are predestined for describing single events, the domain of hermeneutics. In contrast, the other ends of the axes display abstract structures and patterns.¹⁰

In this scheme, field archaeology ranks among the zero points on the scales (Fig. 2b). It is allocated to the "*l'histoire événementielle*," as a site consists of several features. In theory, every feature is linked to a point in time when it was left open or it was closed. Time spans are only mentioned due to the impossibility of exact dating. For the same reasons, field archaeology is ranked on the micro-scale and interpretations of particular features are "working hypotheses."

In contrast, the theoretical goal of landscape archaeology can be ranked in the middle of the classification scheme: the interest concentrates on long term changes (*l'histoire lentement agitée*) and "theories of the middle-range" which explains structures and also bears historical specifics in mind. The geographic meso-scale is at the centre of interest because the examinations focused on the macro-scale are biased towards generalisation.

The "edges" of the diagram are mostly extreme perspectives with little meaning: a study on the macro-scale for example, excluding theories and the depth of time, is only able to map patterns.¹¹ A theory is required to explain the pattern and the comparison of several levels of time so as to be able to visualise historical processes.¹²

There is a gap between field archaeology and the landscape-archaeological synthesis. External archaeological information is required to overcome this gap. Archaeology itself is usually only able to delineate and map patterns. Therefore, the path to explanation and understanding leads through models and analogies from other sciences, which means through interdisciplinarity. For this reason, the theoretical landscape-archaeological objective can be understood as an ideal which is worthwhile but cannot be completely reached.

Within this context, the landscape-archaeological concept, understood as a declaration of intent, can be regarded as complete when a project begins. Otherwise, a landscape synthesis demands an ongoing self-critical advancement of the methods. Therefore, the concept is characterised by never-ending dynamics.

Many scientific concepts or schools dealing with the aspect of "space" narrow the perspective on the subject of landscape. This is the case with the complex of "historical ecology": most of these concepts are focused on ecological interrelations and on systems theory.¹³ They can therefore only be ranked in a small area in the mentioned scheme.

8 e.g., Braudel 1992, 49–87.

9 Merton 1968, 39–50.

10 Merton 1968, 41–50.

11 e.g., Ellenberg 1990.

12 Cf. Eggers 1950.

13 Fischer-Kowalski 2002; Becker and Jahn 2006, 267–283.

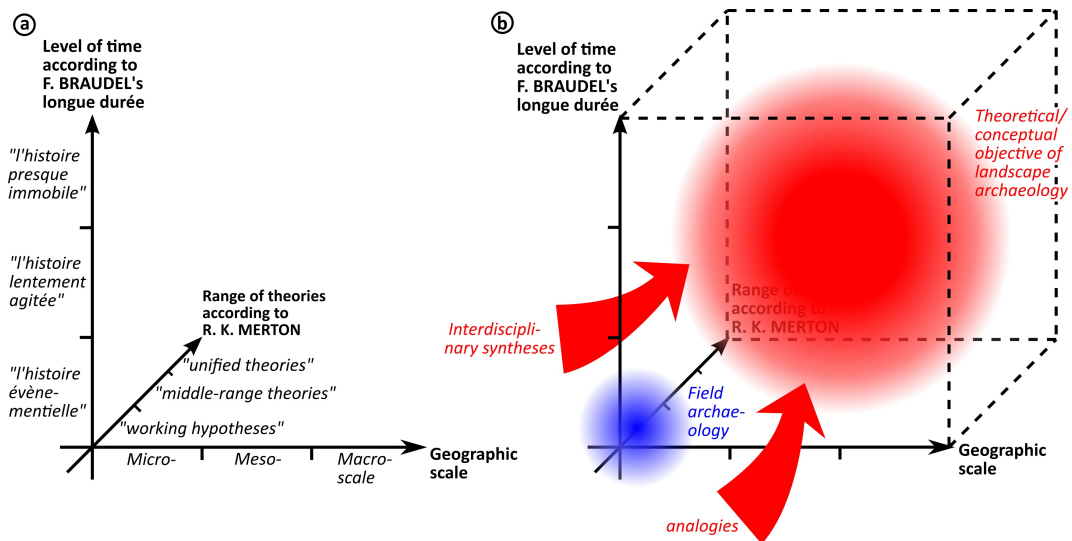


Fig. 2 | Classification scheme of theoretical scientific positions. (a) The axes of the three-dimensional graph are F. Braudel's levels of time, the geographic scale and R. K. Merton's classification of theories. (b) Field archaeology was ranked among the zero points on the scales in contrast to the conceptual objective of landscape archaeology, which is positioned in the middle of the diagram.

This also applies to New Archaeology and Post-Procedural Archaeology. Furthermore, it is worth asking whether certain concepts implicate certain interpretations, for example environment-determinations of culture.¹⁴

In contrast, scientific models are indispensable. A sociological example illustrates this point: as mentioned, most models can only be utilised for certain levels of time and certain geographic scales. There are special models for graveyards and settlements of certain epochs.¹⁵ It is necessary to synchronise all these special models to get a picture of the entire society. Therefore, a model of larger range is required, which is easy enough to use together with the incomplete archaeological material. These criteria are fulfilled by Th. Geiger's¹⁶ model of social stratification, of which the universal applicability has often been emphasised in the sociological discourse.¹⁷

From Archaeological Fieldwork to a Deeper Understanding of Landscape

On the basis of an example from the "Pier-Project," ways leading to a landscape-archaeological synthesis are discussed below. It can be presumed that three settlements existed in the High Middle Ages in the surroundings of the present village (Fig. 1): one settlement was discovered through excavations to the north-west of Pier; a second site was assumed around the church whose previous buildings date back to the early middle ages; the third settlement concentration could have been located around a motte in the floodplain of the river Rur, known through surveys.¹⁸

Apparently, the sites had different functions: in the settlement in the north-west, relicts of pottery kilns and bloomeries as well as slags were found. Handicrafts with a

14 Cf. Meier 2009, 704.

15 Steuer 1982; Christlein 1973; Kropp and Meier 2010.

16 Geiger 1955.

17 Schroth 1999; Geißler 1985.

18 Cf. Piepers 1967.

high fire danger were evidently concentrated there. The church area had a sacral function and the motte a function of feudal domination.

It is possible to draw deductions from the settlement functions, activity zones or social structures by comparing artefacts from different sites. It must therefore be established whether specific handicrafts or professions were linked to a certain social prestige. This is made feasible by analysing whether artefacts of social distinction are regularly connected to certain activity zones.¹⁹ Exotic food or horse riding equipment could be objects of social distinction.²⁰ Moreover, architecture is a strong indicator of social stratification.²¹

Until now, the earliest coherence of professions and social prestige is verified for the guilds of the late Medieval towns, due to the increase of written sources in this epoch.²² But it is very likely that the capability of certain handicrafts was also linked to a different level of social prestige in earlier times. Archaeology is participating in a debate with the neighbouring disciplines in regard to this research area.

Understanding the settlement functions and the social structures opens up several new perspectives: it is now possible to research whether social groups are arranged in the landscape in certain patterns. The positions of churches on exposed mounds or mottes in the floodplains are obvious examples of such patterns that could not be explained with rational reasons only. A sophisticated analysis would uncover less obvious structures. To understand these patterns, a dialogue with the history of mentalities, the economic history as well as hydrology and palaeobotany is needed again.

The mentioned example shows a small, mainly explanatory, perspective on the subject of landscape. An all-embracing synthesis requires a combination of several different perspectives, the improvement of methods and the dialogue with other sciences. The last point presupposes the non-accentuation of the gaps of science theory but tries to overcome them.

Conclusions

The classification scheme of theoretic scientific perspectives presented shows that there is a gap between landscape-archaeological fieldwork and the synthesis of landscape archaeology. This underlines that landscape-archaeological fieldwork is a declaration of intent to attain a landscape synthesis.

Using an example from the “Pier project,” ways of overcoming this gap are discussed: an approximation to the subject of landscape can only succeed when different methodological perspectives are used. This demands the inclusion of hermeneutics as well as explanatory approaches, the application of theories, mainly short and medium range, and the consideration of different geographical scales and levels of time. To explain or understand landscape, interdisciplinarity and analogies are needed. This necessitates the acceptance of the often contradictory methodological and science-theoretical backgrounds of other disciplines.

19 Cf. Lang 2003, 89.

20 e.g., Krauskopf 2005; Goßler 2011.

21 Trebsche, Müller-Scheefel, and Reinhold 2010.

22 Schulz 1977; Kälbe 2001, 260.

Bibliography

Becker and Jahn 2006

E. Becker and Th. Jahn, eds. *Soziale Ökologie. Grundzüge einer Wissenschaft von den gesellschaftlichen Naturverhältnissen*. Frankfurt/Main: Campus Verlag, 2006.

Braudel 1992

F. Braudel. "Geschichte und Sozialwissenschaften. Die lange Dauer". In *Schriften zur Geschichte*. Vol. 1: Gesellschaften und Zeitstrukturen. Stuttgart: Klett-Cotta, 1992, 49–87.

Christlein 1973

R. Christlein. "Besitzabstufungen zur Merowingerzeit im Spiegel reicher Grabfunde aus West- und Süddeutschland". *Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz* 20 (1973), 147–180.

Döring and Thielmann 2008

J. Döring and T. Thielmann. "Einleitung: Was lesen wir im Raume? Der Spatial Turn und das geheime Wissen der Geographen". In *Spatial Turn. Das Raumparadigma in den Kultur- und Sozialwissenschaften*. Bielefeld: Transcript, 2008, 7–45.

Eggers 1950

H.J. Eggers. "Die vergleichende geographisch-kartographische Methode in der Urgeschichtsforschung". *Archaeologia Geographica. Beiträge zur geographisch-kartographischen Methode in der Urgeschichtsforschung* 1 (1950), 1–3.

Ellenberg 1990

H. Ellenberg. *Bauernhaus und Landschaft in ökologischer und historischer Sicht*. Stuttgart: Ulmer, 1990.

Fischer-Kowalski 2002

M. Fischer-Kowalski. "Gesellschaft, Natur und Freiheit. Ein Kommentar aus soziologischer Perspektive". In *Historische Humanökologie. Interdisziplinäre Zugänge zu den Menschen und ihrer Umwelt*. Ed. by V. Winiwarter and H. Wilfing. Vienna: Facultas, 2002, 237–245.

Geiger 1955

Th. Geiger. "Theorie der sozialen Schichtung". In *Wörterbuch der Soziologie*. Ed. by W. Bernsdorf and F. Bülow. Stuttgart: Enke, 1955, 432–446.

Geißler 1985

R. Geißler. "Die Schichtungssoziologie von Theodor Geiger. Zu Aktualität eines fast vergessenen Klassikers". *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 37 (1985), 387–410.

Goßler 2011

N. Goßler. *Reiter und Ritter. Formenkunde, Chronologie, Verwendung und gesellschaftliche Bedeutung des mittelalterlichen Reitzubehörs aus Deutschland*. Beiträge zur Ur- und Frühgeschichte Mecklenburg-Vorpommerns 49. Schwerin: Landesamt für Kultur und Denkmalpflege, 2011.

Gramsch 2003

A. Gramsch. "Landschaftsarchäologie – ein fachgeschichtlicher Überblick und ein theoretisches Konzept." In *Landschaftsarchäologie und geographische Informationssysteme. Prognosekarten, Besiedlungsdynamik und prähistorische Raumordnungen*. Ed. by J. Kunow and J. Müller. Forschungen zur Archäologie im Land Brandenburg 8. Wünsdorf: Brandenburgisches Landesamt für Denkmalpflege und Archäologisches Landesmuseum Wünsdorf, 2003, 35–54.

Jäger 1994

H. Jäger. *Einführung in die Umweltgeschichte*. Darmstadt: Wissenschaftliche Buchgesellschaft, 1994.

Kälbe 2001

M. Kälbe. "Verfassung und soziale Schichtung in oberrheinischen Städten". In *Spätmittelalter am Oberrhein*. Ed. by S. Lorenz and M. Dekiert. Vol. 2: Alltag, Handwerk und Handel 1350–1525. Stuttgart: Badisches Landesmuseum, 2001.

Krauskopf 2005

Ch. Krauskopf. *Tric-Trac, Trense, Treichsel. Untersuchungen zur Sachkultur des Adels im 13. und 14. Jahrhundert*. Braubach: Deutsche Burgenvereinigung, 2005.

Kropp and Meier 2010

K. Kropp and Th. Meier. "Entwurf einer Archäologie der Grundherrschaft". *Beiträge zur Mittelalterarchäologie in Österreich* 26 (2010), 97–124.

Lang 2003

F. Lang. "Zurück nach Arkadien? Möglichkeiten und Grenzen der Landschaftsarchäologie". In *Zwischen Erklären und Verstehen? Beiträge zu den Erkenntnistheoretischen Grundlagen archäologischer Interpretation*. Ed. by M. Heinz, M.K.H. Eggert, and U. Veit. Tübinger archäologische Taschenbücher 2. Münster – New York – München – Berlin: Waxmann, 2003, 79–95.

Lorenz 1997

Ch. Lorenz. *Konstruktion der Vergangenheit. Eine Einführung in die Geschichtstheorie*. Köln – Weimar – Wien: Böhlau, 1997.

Meier 2009

Th. Meier. "Umweltarchäologie – Landschaftsarchäologie". In *Historia archaeologica. Festschrift für Heiko Steuer zum 70. Geburtstag*. Ed. by S. Brather, Geuenich, and Ch. Huth. Reallexikon der Germanischen Altertumskunde Ergänzungsband 70. Berlin – New York: de Gruyter, 2009, 697–734.

Merton 1968

R.K. Merton. *Social Theory and Social Structure*. New York – London: Free Press, 1968.

Meyer and Hansen 2011

M. Meyer and S. Hansen. "TOPOI – Internationaler Workshop: Parallele Raumkonzepte. Conference Report". *eTopoi. Journal for Ancient Studies* 1 (2011), 99–104. URL: <http://journal.topoi.org/index.php/etopoi/article/view/70>.

Nieveler 2006

E. Nieveler. *Merowingerzeitliche Besiedlung. Archäologische Befunde in den nördlichen Rheinlanden*. Geschichtlicher Atlas der Rheinlande: Beihefte 4. Bonn: Rudolph Habelt Verlag, 2006.

Piepers 1967

W. Piepers. "Einzelfragen zur Burgenforschung". In *Château Gaillard. Studien zur mittelalterlichen Wehrbau- und Siedlungsforschung* 2. Beihefte der Bonner Jahrbücher 27. Köln: Böhlau, 1967, 79–86.

Reichert (in press)

S. Reichert. *Die frühesten Kirchen und frühmittelalterlichen Gräberfelder von Inden-Pier, Kr. Düren*. Bonner Beiträge zur vor- und frühgeschichtlichen Archäologie 14. Bonn: Institut für Vor- und Frühgeschichtliche Archäologie. In press.

Saile 1997

Th. Saile. "Landschaftsarchäologie in der nördlichen Wetterau (Hessen): Umfeldanalysen mit einem Geographischen Informationssystem (GIS)". *Archäologisches Korrespondenzblatt* 27 (1997), 221–231.

Schade 2000

Ch.C.J. Schade. "Landschaftsarchäologie – eine inhaltliche Begriffsbestimmung". In *Studien zur Siedlungsarchäologie II*. Universitätsforschungen zur prähistorischen Archäologie 60. Rudolph Habelt Verlag, 2000, 135–225.

Schroth 1999

Y. Schroth. *Dominante Kriterien der Sozialstruktur. Zur Aktualität der Schichtungstheorie von Theodor Geiger*. LIT Verlag, 1999.

Schulz 1977

K. Schulz. "Zunft, -wesen, -recht, 2. Entstehung". *Lexikon des Mittelalters* 9 (1977), 687.

Steuer 1982

H. Steuer. *Frühgeschichtliche Sozialstrukturen in Mitteleuropa: Eine Analyse der Auswertungsmethoden des archäologischen Quellenmaterials*. Abhandlungen der Akademie der Wissenschaften zu Göttingen, Philologisch-Historische Klasse 3/128. Göttingen: Vandenhoeck und Ruprecht, 1982.

Trebsche, Müller-Scheeßel, and Reinhold 2010

P. Trebsche, N. Müller-Scheeßel, and S. Reinhold, eds. *Der gebaute Raum. Bausteine einer Architektursoziologie vormoderner Gesellschaften*. Tübinger Archäologische Taschenbücher 7. Münster – New York – München – Berlin: Waxmann, 2010.

Weiler-Rahnfeld 2009

I. Weiler-Rahnfeld. "Eine fränkische Siedlung des 6.–7. Jahrhunderts in Bonn-Bechlinghoven". In *Archäologie im Rheinland 2009*. Ed. by J. Kunow. Theiss, 2009, 131–133.

Werlen 2000

B. Werlen. *Sozialgeographie*. Bern – Stuttgart – Wien: Haupt Verlag, 2000.

Timo Bremer, Rheinische Friedrich-Wilhelms-Universität Bonn, Institut für Kunstgeschichte und Archäologie, Abt. Vor- und Frühgeschichtliche Archäologie, Regina-Pacis-Weg 7, 53113 Bonn, Germany, tbremer@uni-bonn.de, 0176/22778397